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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/697,221	10/27/2003	William C. Bushong	780396.91470F	9783

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EXAMINER	
CREPEAU, JONATHAN	
ART UNIT	**PAPER NUMBER**
1745	

DATE MAILED: 11/15/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	10/697,221	BUSHONG ET AL.	
	Examiner	Art Unit	
	Jonathan S. Crepeau	1745	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *16 October 2006*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-63* is/are pending in the application.

4a) Of the above claim(s) *39-63* is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-38* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *06 April 2004* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *3-6-06*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Applicant's election of Group I, claims 1-38 in the reply filed on October 16, 2006 is acknowledged. Because applicant did not distinctly and specifically point out the supposed errors in the restriction requirement, the election has been treated as an election without traverse (MPEP § 818.03(a)).

Claim Rejections - 35 USC § 112

2. The following is a quotation of the second paragraph of 35 U.S.C. 112:

> The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

3. Claims 4-6 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention. Claim 4 contains two occurrences of the recitation "nylon." As it is believed that this is a registered trademark, its use in a claim is improper.

Claim Rejections - 35 USC § 102

4. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

5. Claims 1, 2, 7, 8, 17-22, and 26-38 are rejected under 35 U.S.C. 102(b) as being anticipated by WO 02/35618. In Figure 2A, the reference teaches a rechargeable battery having a can (12), a switch assembly (11) having a flexible member (22), and first and second conductive elements (26, 28). The flexible member may be made of nylon (see [0072]), which would inherently possess the characteristics recited in claim 1.

It is noted that the WO '618 reference qualifies as prior art under 35 USC 102(b) against the instant claims. Claim 1 recites "a flexible member comprising a material having a heat deflection temperature greater than 100 C at 264 PSI and a tensile strength greater than 75 Mpa." The parent application, 10/045,934 does not adequately support this subject matter in the manner required by 35 USC 112 first paragraph because the parent application does not contemplate, in a generic sense, a material (i.e., *any* material) having these properties as recited in the claim. Therefore, the WO '618 reference qualifies as prior art under 35 USC 102(b) against the instant claims.

6. Claims 1, 2, 7, 8, and 36-38 are rejected under 35 U.S.C. 102(b) as being anticipated by Bosben (U.S. Patent 3,617,386). The reference teaches a rechargeable battery having a can (10), a switch assembly (23) having a flexible member (16), and first and second conductive elements

(24, 15). The flexible member may be made of nylon (see co. 3, line 11) which would inherently possess the characteristics recited in claim 1.

Claim Rejections - 35 USC § 103

7. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

8. Claims 3-6, 10, 11-16, and 23-25 are rejected under 35 U.S.C. 103(a) as being unpatentable over WO 02/35618.

The reference is applied for the reasons stated above. However, the reference does not expressly teach that the flexible member comprises an aromatic polyamide as recited in claim 3, that the separator comprises polypropylene (claim 10), that "inert" material is located in the electrode (claim 11), or that the rivet comprises a nonferrous alloy (claim 23).

However, the invention as a whole would have been obvious to one of ordinary skill in the art at the time the invention was made because each of these features would be rendered obvious by the disclosure of WO '618. Regarding the recitation of an aromatic polyamide, it is noted that WO '618 discloses "nylon," which the skilled artisan would recognize as comprising a class of aromatic polyamides. As such, the use of such a material as the flexible member of WO '618 is fairly suggested by the reference.

Further, polypropylene as recited in claim 10 is well-known as a separator material in alkaline batteries that provides strength and good insulating function.

Regarding the "inert" material recited in claim 11, this term is considered to encompass electrically conductive materials not participating in the electrode reactions. Use of these materials is well-known to increase electrical conductivity within the electrode, and the artisan would be sufficiently skilled to use an optimal amount of the material in the electrodes of WO '618.

Regarding claims 23-25, which recite that the rivet or tab comprises a nonferrous alloy such as a plating on steel, it would be well within the skill of the art to use, for example, nickel-plated steel in the electrical contacts of WO '618. This material provides the advantages of steel (i.e., strength) but the nickel layer provides corrosion resistance. As such, the subject matter of claims 23-25 would also be rendered obvious to the skilled artisan.

9. Claims 3-6 and 9 is rejected under 35 U.S.C. 103(a) as being unpatentable over WO '618 as applied to claims 3-6, 10, 11-16, and 23-25 above, and further in view of Schubert et al (U.S. Pre-Grant Publication No. 2005/0079404).

WO '618 does not expressly teach that the flexible member comprises glass-filled polyphthalamide, as recited in claims 3, 4, and 9.

Schubert et al. teach a nonaqueous battery comprising a seal member comprising glass fibers and a resin such as polyphthalalmide (see [0025], [0027]).

Therefore, the invention as a whole would have been obvious to one of ordinary skill in the art at the time the invention was made because the artisan would be motivated to use a glass-filled polyphthalamide as disclosed by Schubert et al as the flexible member of WO '618. In [0025] Schubert et al. teach that "[t]he seal member of the invention can be used to provide an excellent compressive seal for an aperture in the cell housing and also form at least a part of a reliable pressure relief vent for the cell." Accordingly, the artisan would be motivated to use a glass-filled polyphthalamide as the flexible member of WO '618.

Double Patenting

10. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

11. Claims 1-38 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1-75 of U.S. Patent No. 6,878,481 in view of Schubert et al. The '481 patent claims do not expressly teach the properties or composition of the flexible member as recited in the instant claims. However, it would be obvious to use the glass-filled polyphthalamide disclosed by Schubert et al. as the flexible member of the '481 patent claims for the reasons stated above. Therefore, since such material would inherently possess the claimed properties, the instant claims are an obvious variant of the '481 patent claims.

Conclusion

12. EP 470726, indicated as an "X" reference on the International Search Report, has been considered but not applied herein because it is cumulative of the art of record.

13. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jonathan Crepeau whose telephone number is (571) 272-1299. The examiner can normally be reached Monday-Friday from 9:30 AM - 6:00 PM EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Patrick Ryan, can be reached at (571) 272-1292. The phone number for the organization where this application or proceeding is assigned is (571) 272-1700. Documents may be faxed to the central fax server at (571) 273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

J. C.

Jonathan Crepeau
Primary Examiner
Art Unit 1745
November 13, 2006